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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/520,704

07/29/2005

Jan De Kroon

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NIXON & VANDERHYE, PC  
901 NORTH GLEBE ROAD, 11TH FLOOR  
ARLINGTON, VA 22203

EXAMINER

FREEMAN, JOHN D

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

06/16/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/520,704	<b>Applicant(s)</b> DE KROON ET AL.	
	<b>Examiner</b> John Freeman	<b>Art Unit</b> 1794	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 March 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,4 and 6-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4 and 6-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 27 March 2009 has been entered.

### ***Claim Objections***

2. Claims 1 and 4 are objected to because of the following informalities: each reads "X-B" but should instead recite "X=B". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 1, 3, 4, and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salste et al. (WO 98/03332) in view of Nijenhuis et al. (WO 00/35992).

5. Salste et al. (hereafter Salste) disclose food packaging comprising a paper or cardboard core and a barrier layer of polyamide (p1 ln 5-12). The polyamide is extruded onto core (p4 ln 38-p5 ln 7).

6. Salste is silent with regard to branched polyamides as presently claimed.

7. Nijenhuis discloses randomly branched polyamides conforming to the formulae outlined by Applicant (p2 ln 29-p3 ln 32). The polyamides are suitable for films and molded articles (p7 ln 13). The films are gel-free and exhibit little, if any, neck-in during production (p 7 ln 18-29).

8. At the time of the invention, it would have been obvious to one of ordinary skill in the art to use the branched polyamides as taught by Nijenhuis as the polyamide required by Salste because said polyamides would be gel-free and exhibit little, if any, neck-in during production.

Art Unit: 1794

9. Claims 1, 3, 4, and 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salste et al. (WO 98/03332) in view of Thoma et al. (US 3,893,981).

10. Salste discloses food packaging comprising a paper or cardboard core and a barrier layer of polyamide (p1 ln 5-12). The polyamide is extruded onto core (p4 ln 38-p5 ln 7).

11. Salste is silent with regard to branched polyamides as presently claimed.

12. Thoma et al. (hereafter Thoma) disclose polyamides useful as films that can be dyed and remain fast to water and boiling washes (col 2 ln 41-46). The polyamides disclosed overlap with the presently claimed polyamides.

13. Example 4 discloses a polyamide of the AB monomers caprolactam and aminocaproic acid, the carboxylic acids adipic acid and benzoic acid, and the amine diethylenetriamine (col 14 Table 1). The following table summarizes the data contained therein.

<b>Acid</b>	<b>n</b>	<b>f</b>
Adipic acid	0.6	2
Benzoic acid	0.8	1
<b>Amine</b>	<b>n</b>	<b>f</b>
diethylenetriamine	1	3

Through calculations  $1/[(F_A-1)*(F_B-1)] = 5/6 = 0.833$  and  $P = 2/3 = 0.667 \leq 1$ . Therefore, example 4 falls within the scope of the presently disclosed polyamides.

14. At the time of the invention, it would have been obvious to one of ordinary skill in the art to use the polyamides as taught by Thoma as the polyamide required by Salste because said polyamides would retain their color upon being dyed despite the presence of water, and therefore provide desirable aesthetic properties.

***Claim Rejections - 35 USC § 112***

15. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

16. Claims 1, 3, 4, and 6-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

17. Claims 1 and 4 each recite a coating layer of polyamide which “consists mainly of” a branched polyamide. Applicant invokes exclusive language, i.e. “consists...of”, but then modifies the phrase with the open-language of “mainly”. The examiner interprets the claims to be inclusive of other material than what is explicitly disclosed therein. If Applicant intends to use exclusive language, the examiner suggests “mainly” be deleted. On the other hand, if Applicant intends to use inclusive language, the examiner suggests “comprises” to be used in place of “consists...of”.

***Response to Arguments***

18. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

19. Applicant notes the comparative data of the declaration filed 8 January 2009, which discloses an inventive example wherein the production rate is increased and uniform thickness distribution is achieved (p6). The data are not persuasive because they are (A) not commensurate in scope with the claims, and (B) relate to only the difference in thickness stability between branched polyamides and non-branched polyamides for the reasons noted below:

20. (A) The data are not commensurate in scope with the claims the data test only one specific branched polyamide. The scope of claim 1, however, covers all polyamides conforming to the disclosed formulas. A single data point falling within the broad space of polyamides defined by the formulas may not be representative of all such polyamides. Also it is unclear whether the relative loading of the various components of the branched polyamide plays a role in the thickness stability. Finally, the inventive

Art Unit: 1794

polyamide includes a "nucleating agent anti lubricant" and has a higher relative viscosity than the non-branched polyamide (2.95 compared to 2.65). It is unclear what effects these differences may have on the thickness stability of the polyamide.

21. Also, the "web stability" measurements are taken at a specific production rate of 200 m/min. The examiner posits that slower production rates may render the difference in web stability negligible.

Therefore, blanket statements regarding stability may not be appropriate.

22. (B) The data relate to only the difference in thickness stability between branched polyamides and non-branched polyamides. The rejection over Salste in view of Nijenhuis, however, does not result in non-branched polyamides. In fact, Nijenhuis uses the same polyamides as presently claimed. Therefore, the data do not differentiate the present invention from the prior art.

### ***Conclusion***

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Miroslav EP '949 discloses various properties of branched polyamides.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Freeman whose telephone number is (571)270-3469. The examiner can normally be reached on Monday-Friday 7:30-5:00PM EST (First Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on (571)272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1794

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John Freeman  
Examiner  
Art Unit 1794

/John Freeman/  
Examiner, Art Unit 1794

/Callie E. Shosho/  
Supervisory Patent Examiner, Art Unit 1794